Roanoke County Land Development Procedures

In order to maintain the character and integrity of neighborhoods, to promote excellence of development, to prevent undue traffic hazards, and to encourage the most harmonious development and use of land, a Development Plan with its accompanying Erosion and Sediment Control Plan is required for commercial and residential development and shall be submitted to Roanoke County's Development Review Coordinator.

These plans will be distributed to the appropriate County departments/divisions for review and approval. The design engineer or developer is responsible for separate submittals to the Western Virginia Water Authority, the Town of Vinton, the Virginia Department of Transportation and the Virginia Department of Health (when applicable) for their review and approval. When applicable, all of these entities must approve the development plans prior to the issuance of any permits for all types of developments as required by Section 30-90 Site Development Plans of the Roanoke County Zoning Ordinance and the Roanoke County Erosion and Sediment Control Ordinance. In cases where jurisdictional waters exist on the proposed site, the developer may need to obtain approval and/or permits from any or all of the following agencies: the Department of Environmental Quality, the Department of Conservation and Recreation, the Federal Emergency Management Agency and the Marine Resource Commission.

In order to make the Development Review Procedure more efficient for you, we have prepared this booklet to guide you through the process. We hope you will find it helpful.

TABLE OF CONTENTS

The Development Plan Procedure

A. Concept Plan Review	3
B. Concept Plan Meeting	4
C. Formal Plan Review	4
D. Plan Resubmittal	4
E. Review by the Western Virginia Water Authority (WVWA)	5
F. Review by Town of Vinton Public Works for plans in east Roanoke County (TOVPW)	5
G. Review by Town of Vinton Public Works for plans within Town of Vinton Limits	5
H. Review by the Virginia Department of Transportation (VDOT)	6
I. Review by the Roanoke County Health Department (VDOH)	6
J. Preliminary Plan Approval	6-7
K. Preconstruction Meeting	8
L. Preconstruction Meeting for Projects within Town of Vinton Limits	8
M. As-Built Plans	8
N. Further Information	8
Roanoke County Community Development Appendices:	
Development Application Form	9
Conceptual Meeting Checklist	10
Concept Plan Checklist	11
Review Submission Checklists	12
Cover Sheet Checklist	13
Development Plan Item Inclusion Checklist	14-15
Development Plan Review Checklist	16-20
Plat Checklist	21-22
Schedule of Fees for Plan and Plat Review	23
Western Virginia Water Authority (WVWA) Appendices:	
Plan Submittal Checklist	24
Water and Sewer Availability Application	25
Form for Sizing Water Service Lines and Meters	26
Preliminary Pretreatment Wastewater Survey Form	27-28
Schedule of Utility Fees	29
Roanoke County Fire & Rescue Appendix:	
Development Plan Checklist	30
Fire Hydrant Placement Policy (Supplemental Spring, 2006)	reserved
Apparatus Access Road Policy	reserved
Plot Plan Requirements: (Supplemental Spring, 2006)	reserved
Stormwater Quality Requirements: (Supplemental Spring, 2006)	reserved

The Development Plan Procedure

Submitting development plans will allow all required reviewing entities to review and comment on the plan for general compliance with all applicable regulations and requirements. Zoning of the site will be checked to ensure that the proposed use is permitted in the district. The applicant will be advised of requirements relative to building setbacks, subdivisions, parking, screening and buffering of the site, Special Use Permits (SUP) required, flood plains, erosion and sediment control, stormwater management, availability of water and sewer services and any other requirements that may affect the development. Reviewing entities for Concept Plans or Full Plan Review must include, but is not limited to, Planning & Zoning, Fire and Rescue, Engineering, and the Western Virginia Water Authority (WVWA) or Town of Vinton Public Works Department (TOVPW), as applicable, the Virginia Department of Health (VDOH)and the Virginia Department of Transportation (VDOT). Roanoke County's Development Review Coordinator will prepare a review letter which will include all comments received from these entities with the exception of the Virginia Department of Transportation and the Virginia Department of Health.

Four (4) sets of plans and a Development Application should be mailed to:

Roanoke County Department of Community Development Development Review Coordinator PO Box 29800 Roanoke, VA 24018

or delivered to
Development Review Coordinator
Roanoke County Administration Center
5204 Bernard Drive
Second Floor
Roanoke, VA 24018

A. CONCEPT PLAN REVIEW

A concept plan is **required** if the plan meets the appropriate qualifications (See page 10).

This review will allow all reviewing entities to comment on the plan for general compliance with all regulations and requirements before proceeding to the formal review. Roanoke County's Development Review Coordinator will prepare a concept review letter which will include all comments received from these entities. Roanoke County's review letter will be mailed and/or emailed to the owner/developer and the design engineer.

The following should be included in the submittal for a concept review:

Completed Development Application (See page 9).
Completed Concept Plan Checklist (See page 11).
Four (4) sets of concept plans.
If the site is to be served with public water and/or sewer, a map showing the services requested is required on Roanoke County topographic maps.
Cover sheet shall list all proffers for site, if applicable.

Your careful completion of all development applications and checklists will expedite the process. A plan cannot be logged in for review without the development application due to the pertinent information it shows. For post initial reviews, a comments response letter is required before a plan will be logged in to note the revisions to the plan for the reviewers. This will help expedite the review of the plan. No application is due with subsequent review submittals.

B. CONCEPT PLAN MEETING

If after the concept review has been completed by staff, the owner/developer and/or design engineer desires to meet with the reviewing entities to discuss the concept plan, the Development Review Coordinator should be notified and a meeting will be scheduled.

C. FORMAL PLAN REVIEW

Development plans should be submitted to Roanoke County's Development Review Coordinator at the address noted above and will be distributed to Roanoke County's Engineering division, Planning & Zoning division and the Fire & Rescue Department. Please note that in addition to Roanoke County's review, the Virginia Department of Transportation (VDOT), the Western Virginia Water Authority WVWA or the Town of Vinton Public Works, and the Virginia Department of Health may also have to review the development plan. Plans for review by these entities must be submitted directly to them.

Comments from the WVWA and the Town of Vinton Public Works are forwarded to Roanoke County's Development Review Coordinator for inclusion in the County's review letter. Comments from VDOT and the Virginia Department of Health will come directly from them and will not be included in the County's review letter.

Section 30-90B of the Roanoke County Zoning Ordinance requires that plans be prepared by a certified Engineer, Architect or Land Surveyor who is registered with the Commonwealth of Virginia as noted in the Code of Virginia §15.2-2262.

Please use the checklists in the appendices of this booklet for help in preparation of the Development Plans and/or the Subdivision Plat. Checklists should be submitted with plans for review. Any appropriate plats must be an integral part of the development plan.

Each entity will respond in writing to the Development Review Coordinator. Contact names and phone numbers for the review staff will be shown in the review letter so that the design firm may contact the reviewer for specific questions. The owner/developer and the design firm will then be notified in writing by the Development Review Coordinator of all review comments.

A review meeting is required and will be scheduled with the date, time and location shown in the first review letter. This meeting will be with all reviewing entities, the design engineer, and the developer to allow the opportunity to discuss plans and comments with the plan review team. These meetings are held on Wednesdays in Room 215 or 217 of the Roanoke County Administration Building, second floor. Please contact the Development Review Coordinator for further details on scheduling meetings.

The development plan will either be approved or disapproved with comments in the following timeframes:

Concept Plan

Erosion & Sediment Control Plans:

Site Plan Submissions:

Subdivision Plan submissions:

One (1) week (6 working days)

One (1) week (6 working days)

Two (2) weeks (10 working days)

Three (3) weeks (15 working days)

Field Revisions One (1) week (6 working days)

Revision to Approved Plans

One (1) week (6 working days) up to Two (2) weeks (10 working days) depending on revision

D. PLAN RESUBMITTAL

Each time the development plans are disapproved, the design firm must revise them and resubmit for review by the appropriate entities within 6 (six) months or the project will be considered null and void, the review process will cease and further review will require another initial submission of plans, plats and fees. The plan will be reviewed under the same timeframes as shown above. When resubmitting, please respond to all review comments in written form indicating where or how the comments were addressed to expedite the review of the plan. A resubmittal will not be logged in for review without this comments response letter.

E. REVIEW BY THE WESTERN VIRGINIA WATER AUTHORITY

The Western Virginia Water Authority (WVWA) must review and approve all development plans which will require water and/or sewer connections unless the plan is within the Town of Vinton service area. If the development is within the Town of Vinton service area, the TOVPW must review the plan.

Three (3) sets of development plans should be submitted to the following address:

Western Virginia Water Authority Engineering Services Division 601 S. Jefferson Street, Suite 300 Roanoke, VA 24014. (540) 853-5659

WVWA Construction Standards and other pertinent forms can be found at www.westernvawater.org

F. REVIEW BY THE TOWN OF VINTON PUBLIC WORKS DEPARTMENT FOR PLANS IN ROANOKE COUNTY, BUT EAST OF THE TOWN OF VINTON CORPORATE LIMITS

Development plans located in Roanoke County, but east of the Town of Vinton Corporate Limits must be reviewed by the Town of Vinton Public Works Department, as the Town of Vinton will supply the water and sewer lines that will serve the development. Plans will also be reviewed by the County's review team.

For these projects, please submit two (2) sets of development plans to

Town of Vinton Planning & Zoning 311 South Pollard St Vinton, VA 24179 Planning & Zoning (540) 983-0601 Public Works (540) 983-0646

TOV Planning & Zoning is responsible for insuring that TOVPW receives one (1) set of plans for review and they will also have a set for their use. Roanoke County's Development Review Coordinator will respond in writing to the owner/developer and the design firm including the TOVPW comments.

G. TOWN OF VINTON CORPORATE LIMITS PLAN REVIEW

Development plans located within the Town of Vinton Corporate Limits must be reviewed by the Town of Vinton Planning and Zoning Department, the Vinton Public Works Department, and the County of Roanoke.

For these projects, please submit five (5) sets of development plans to

Town of Vinton Planning & Zoning 311 South Pollard St Vinton, VA 24179 Planning & Zoning (540) 983-0601 Public Works (540) 983-0646

TOV Planning & Zoning is responsible for ensuring that Public Works receives one (1) set of plans for review, that Roanoke County will receive two (3) sets of plans (Engineering, Fire & Rescue, File), and they will have a set for their use. The Town of Vinton Planning & Zoning Department will respond in writing to the design firm which will include TOVPW comments, the County's Erosion and Sediment Control and Stormwater comments, Fire & Rescue comments and TOV comments.

If you are unsure about where your plans should be submitted, please contact Roanoke County's Development Review Coordinator for assistance.

H. REVIEW BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT)

The Virginia Department of Transportation must review the development plans for all new subdivision streets and any new or existing entrances to a public highway. Their review letter will be sent separately from the County's review letter. VDOT must review and approve the plan and must issue either a temporary or permanent entrance permit if a project has an entrance onto a public highway, even if there is an existing entrance. Roanoke County will not approve a plan without one of these permits.

Plans should be mailed to the following address:

The Virginia Department of Transportation PO Box 3071 Salem, VA 24153

or delivered to

714 South Broad Street Salem, VA 24153 (540) 387-5488

VDOT Construction Standards can be found at www.virginiadot.org/projects/ssr-rev.asp

I. REVIEW BY THE ROANOKE COUNTY HEALTH DEPARTMENT

The Roanoke County Health Department must review and approve the following:

- 1. All new subdivision developments which require the use of on-site septic systems and/or wells;
- 2. All new restaurants;
- 3. Restaurants which will be remodeled, are a change of use from a prior business, or are changing their place of business.

Plans should be submitted to the following address:

Roanoke County Health Department 227 South Pollard Street Vinton, VA 24179 (540) 857-7807 www.vdh.state.va.us

J. PRELIMINARY PLAN APPROVAL

Once the County has completed its review and has preliminarily approved the site development plan for construction, a preliminary approval letter will be sent to the owner/developer and the design firm outlining all items that must be submitted at least two (2) working days prior to a preconstruction meeting being scheduled. This letter also states that all reviewing entities must approve the site plan before a preconstruction meeting can be held. A preconstruction meeting must be held with the County and the WVWA or Town of Vinton Public Works before any grading or construction can begin. This approval does not include the building review and approval. This review and approval is handled separately through the Building Commissioner's office.

The following actions must be taken prior to final plan approval and an E & S permit and/or a building permit being issued:

Submissions:

	Six (6) complete sets of plans for use as stamped approved sets for the preconstruction meeting must be submitted. These will be distributed as follows: two (2) to Roanoke County; two (2) to the Western Virginia Water Authority or Town of Vinton Public Works; and two (2) to the developer. If additional sets are required by the contractor, please submit the desired number of sets.
	A copy of the Department of Conservation and Recreation (DCR) general permit application, a copy of the application check, and a copy of the Stormwater Pollution Prevention Plan (SWPPP).
	A copy of any additional Department of Environmental Quality (DEQ), Army Corps of Engineer (USACOE) or Marine Resource Commission (MRC) permits.
	A VDOT approval letter.
	Either a temporary or a permanent highway entrance permit must be submitted for any work in the VDOT right-of-way or for entry onto the property.
	A Virginia Department of Health approval letter, if applicable.
	A WVWA approval letter, if applicable.
	A TOVPW approval letter, if applicable.
	Have the owner/developer sign the site plans (these can be signed at the preconstruction meeting if the owner/developer attends).
	Provide the name and a copy of the certificate for the Virginia Certified Responsible Land Disturber (RLD).
	Original plat with seals of all owners, trustees, and surveyors, if applicable.
	All recorded off-site easements.
	Fees/Sureties/Agreements:
	Erosion and Sediment Control Permit fees.
	Review fee.
	Street sign fee, if applicable.
	The surety for the Site Agreement for public improvements.
	A Site Agreement must be signed and submitted.
	The surety for the Erosion & Sediment Control Agreement to guarantee the erosion control measures shown on the plan will be installed.
	An Erosion and Sediment Control Agreement must be signed and submitted.
П	A Stormwater Management Agreement with attached plat must be signed and submitted

F. PRECONSTRUCTION MEETING

Once all items above are submitted to the Development Review Coordinator, the developer must contact the Development Review Coordinator to indicate that a preconstruction meeting needs to be scheduled. The preconstruction meeting will be scheduled with the owner/developer two (2) working days later, if possible. It is the responsibility of the owner/developer to notify his responsible land disturber and his utility contractor to attend the meeting with him.

The Development Review Coordinator will coordinate the meeting with the County review engineer, the County inspector, and the WVWA or the Town of Vinton Public Works.

The project engineer will inform the owner/developer verbally and in writing of the County's obligation to perform inspections on site. Everyone in the meeting will be required to sign the pre-construction checklist indicating their knowledge of the obligation to perform inspections on site.

The Erosion Control Permit is given to the developer at this meeting.

The developer MUST contact the project inspector 24 hours before beginning any grading or construction on the property.

The project inspector will visit the site within 48 hours of the developer's call to ensure that all necessary erosion and sediment control measures are properly installed according to the approved plan.

H. PRECONSTRUCTION MEETING FOR PROJECTS WITHIN THE TOWN OF VINTON

Preconstruction meetings for projects within the Town of Vinton Corporate Limits will be coordinated by the Town of Vinton Planning & Zoning Department. These meetings will be held in the conference room of the Town of Vinton Municipal Building located at 311 South Pollard Street, Vinton.

L. <u>AS-BUILT PLANS</u>

As-built plans showing water and sewer as-builts must be submitted to and approved by the WVWA prior to the issuance of the Certificate of Substantial Completion. As-builts showing the stormwater system and the stormwater pond/facility must be submitted to Roanoke County and approved prior to sureties being released.

M. FURTHER INFORMATION

If you should find that you need further information about any of the topics discussed herein, please do not hesitate to contact our office:

Development Review Coordinator Phone: (540) 772-2190 or 772-2065 ext. 246 Fax: (540) 772-2108 or

dsowder@roanokecountyva.gov

DEVELOPMENT APPLICATION

(Please Type or Print)

DATE:		PROJECT NUMBER:	
APPLICANT:	PHONE	: FAX:	
OWNER:	PHON	E:FAX: _	
ADDRESS:		_ E-MAIL ADDRESS:	
ENGINEER:	PHON:	E: FAX:	
CONTRACTOR:	PHONE: _	FAX:	
		E-MAIL ADDRESS:	
	TIFICATION (CIRCLE) MAIL -		
	SITE INFORMA		
PROPERTY ADDRESS:			
	GRADED AREA:		
	MAGIST		
ZONING:	TOTAL UNITS:	TOTAL LOTS:	
REQUESTED SERVICE: (C	TIRCLE)		
WATER FACILITIES:	(COUNTY - CITY - TOWN OF VI	NTON - PRIVATE - WELL - OTHE	ER)
SEWER FACILITIES:	(COUNTY - CITY - TOWN OF VI	NTON – PRIVATE - OTHER)	
IS BUILDING TO BE SPRIN	IKLERED?FLOW R	EQUIRED:	GPM
It is understood that submission plans.	on of inaccurate or incomplete information	may delay final approval of the comp	rehensive development
referenced project as approved	understand the provisions of the Erosion and I further grant the right-of-entry to this printering for compliance with the aforesaid (roject, as described above, to the design	
	-	SIGNATURE OF APPLI	CANT

ROANOKE COUNTY CONCEPTUAL MEETING CHECKLIST

If your require	proposed development meets any of the following criteria, a conceptual meeting with reviewing staff is ed:
	Any project with a water line or sewer line extension of more than 300'
	Any project requiring the construction of a bridge
	Any project with a watercourse crossing the property
 regula	Any project with a stream crossing or work in a watercourse subject to DEQ, FEMA or VMRC tions
	Any project requiring a traffic study as identified by VDOT or the Roanoke County Traffic Engineer
	Any project located in a designated shrink swell soil area as identified by the Building Commissioner
	Any project with 25% or greater slopes in the area of land disturbance
	Any project with zoning conditions
	Any project requiring a 2232 review by the Planning Commission
	Any project that has been granted a rezoning for the development (to verify proffers)
	Any project at the discretion of the Development Review Coordinator

ROANOKE COUNTY CONCEPT PLAN CHECKLIST

If dev	relopment is to be phased, a concept plan is required showing entire development.
Devel	opment name and use.
Owne	r's name, address and telephone number.
Date,	scale of plat and north point of map.
Topog	graphy map with a suitable scale and contour interval.
All nat	tural watercourses.
All pro	pperty lines.
	ons, names of adjoining property owners and/or properties, and Roanoke County tax mapers on parcels adjacent to project.
The zo	oning and land use of all adjacent properties.
All par	rking and loading spaces.
Sidew	alks, alleys and any easements.
Any di	riveways, entrances/exits, curb openings and crossovers.
	cations, widths and names of all existing or platted streets or other public ways within or adjacent development.
Appro	ximate street grades and sight distances at all intersections.
All bui	ldings.
Is build	ding to be sprinkled?
A copy	y of Western Virginia Water Authority (WVWA) water and sewer maps (if required).
Please	e submit any proffer conditions at the site and show how they are addressed.
Addre	ss stormwater management; provide location and HEC-2 or HEC-RAS Analysis if in floodplain.
Has th	ne Virginia Department of Transportation (VDOT) been provided with plans?
Has th	ne Western Virginia Water Authority (WVWA) been provided with plans? Refer to their checklist.
Has th	ne Town of Vinton been provided with plans?
Has th	ne Health Department been provided with plans?
Has th	ne Department of Environmental Quality been contacted for potential stream or wetland impact?
I certif	y that all items required in the checklist above are complete and submitted.
Signat	ture Date 11

ROANOKE COUNTY REVIEW SUBMISSION CHECKLIST

If applicable, the following must be submitted for review:

 Four (4) complete sets of development plans to Roanoke County Community Development.
 Three (3) complete sets of development plans to the Western Virginia Water Authority.
 Two (2) sets of development plans to the Town of Vinton.
 Two (2) sets of development plans to VDOT and one set (1) of calculations.
 All plan sets shall include a copy of the plat (if one is required for the development).
 Two (2) sets of the complete drainage calculations.
 Erosion Control Narrative directly on development plans.
 One (1) copy of the Development Plan Checklist.
 One (1) copy of the Plat Checklist.
 Landscape Plan.
 _ Photometric Plan.
 In addition, three (3) complete sets of building plans (Certified by Architect or Engineer) including a one page site plan should be submitted to the Building Commissioner at the same address as the development plans, but not bound with the development plans.
I certify that all items required in the checklist above are complete.
Signature Date

ROANOKE COUNTY COVER SHEET CHECKLIST

The Roanoke County covers	sheet is required in all sets of plans.
Name of development.	
Owner/developer's name and	d address.
Signature of owner/develope	er.
Name and address of Engine	eer, Architect or Surveyor preparing the plans.
Professional seal(s).	
Complete GIS tax map numb	per(s) of the development.
Vicinity map.	
Date, scale and number of s	treets.
Magisterial district.	
Quantity and cost for all publ	lic improvements.
List all proffer conditions.	
Use of property in development	ent.
I certify that all items required in the	checklist above are complete.
Signature	/ Date

DEVELOPMENT PLAN ITEM INCLUSION CHECKLIST

 All property lines including distances and bearings.
 All adjacent property owners with Roanoke County Tax Map Numbers.
 Zoning designation and current land use of all adjacent properties. (For additional requirements concerning Planning and Zoning, see Roanoke County Zoning Ordinance, Sections 30-32 through 30-76 through 30-90-4.
 Building(s) should be located on plans with distances from property lines shown. Lot and building coverage should also be provided. Show zoning tabulation table on plan.
 All building setback lines from street right-of-ways shown. (See Roanoke County Zoning Ordinance). Show zoning tabulation table on plan.
 Existing and proposed topography with a maximum of two-foot contour intervals within one hundred feet of all buildings and a maximum of ten-foot intervals on the remainder of the development.
 Floodway, Floodplain and elevation of 100-year flood plain if the site is adjacent to a natural watercourse which drains an upstream drainage area of greater than 100 acres, or if the site is in a FEMA-designated flood hazard zone. (See Roanoke County Zoning Ordinance).
 Landscape and buffering plan*, including plant schedule detailing plant types, original and ultimate heights of plantings, and quality and spacing of vegetation. (*=If required by Section 30-92 of the County Zoning Ordinance). Show bonding as per Schedule
 In compliance with Chapter 8 of the Roanoke County Code, an Erosion Control Plan along with an Erosion Control Narrative must be submitted. The submittal must include Roanoke County's Erosion Detail Sheet along with cost estimates for all erosion control measures.
 The 19 state minimum standards must be listed on the plan and a description of how they will be met must be included. If not applicable, state N/A.
Cost estimates must be submitted for any public physical improvements, including required landscaping and all erosion control measures.
 A detailed Stormwater Management Plan designed by a professional engineer in accordance with the County of Roanoke drainage standards (Chapter 8 of the Roanoke County Code) must be submitted along with all calculations for adequacy of all existing and proposed stormwater management systems.
 Delineate on the site plan(s) and submit plat(s) showing a metes and bounds description detailing all areas around stormwater detention facility as a Stormwater Detention Easement. This plat will be recorded with the maintenance agreements for the stormwater detention facility.
 Roanoke County requires the private maintenance of all detention/retention ponds, which may be required by the Roanoke County Drainage Standards. These maintenance agreements will be provided to the developer with the review of the development plans.
 All on and off-site drainage and utility easements must be shown and, if necessary, submitted for public acceptance.
 Section 29-5.4 of the Roanoke County Subdivision Ordinance requires that all lots created must have an approved septic system if the lots do not connect to public sanitary sewer. A soil study must be prepared by a consulting engineer or soil scientist and submitted to the State of Virginia/Roanoke County Health Department for review.

 All inert waste (septic) areas must be shown, and they must meet all State standards.
 Three complete and sealed sets of building plans (if required).
 Fire prevention: show the location of all existing and proposed fire lanes and hydrants.
 Parking areas should be shown with specific dimensions for all parking, loading and handicap spaces as well as travel lanes. (See Roanoke County Street and Off-Street Parking – Design Standard and Specification, Roanoke County Zoning Ordinance Section 30-91/Off-Street Parking, Stacking and Loading).
 Show all sidewalks, alleys and any easements.
 Show all driveways, entrances/exits, curb openings and crossovers, sight distances at access points must be provided.
 Show the lighting plan, including pole heights and fixture types. (Refer to Roanoke County Zoning Ordinance, Section 30-94).
 Show courses and distances of centerlines of all streets or roads adjoining the proposed development.
 All new public streets should be designed to Roanoke County Public Street Standards. (See Roanoke County Street and Off-street Parking Standards).
 If any signs are to be erected, the location must be shown on the development plan and a sign permit obtained for each. (See Section 30-93 of the Roanoke County Zoning Ordinance).
 Show dumpster location including screening. (Section 30-92.6(F))

ROANOKE COUNTY DEPARTMENT OF COMMUNITY DEVELOPMENT DETAILED DEVELOPMENT REVIEW CHECKLIST

PROJECT N	IAME:
PROJECT N	NUMBER:
ENGINEER:	
GENERAL:	
	Vicinity Map showing the location of the site and the surrounding area must be shown.
	North Arrow must be shown.
	Roanoke County Cover Sheet is required.
	Check Bonding Amounts. All public improvements must be included in the site bond.
	Show all physical improvements such as buildings, parking lots, access roads, utility construction, etc.
	SWPPP Permit must be obtained for any disturbed areas of more than one (1) acre.
	Are any DEQ or Army Corps of Engineers jurisdictional waters present? If so, plan must be submitted to the respective agency for review and approval.
STREETS:	Refer to Roanoke County's Public Street and Parking Design Standards and Specifications and VDOT specifications.
	Miscellaneous Construction Standards. (Section 203.00)
	VDOT approval required (temporary and/or permanent). (Section 203.01)
	Street categories on the plans. (Section 200.09)
	Pavement surface shown as asphalt. (Section 200.04)
	Subdivisions creating > 1500 vpd, additional entrances are required. (Section 200.11)
	Reverse frontage shown for streets which are classified as primary/arterial and/or carry in excess of 5,500 vpd as determined by the director. (Section 200.05 and 200.06)
	Street connections are aligned opposite of each other or separated a minimum of 200 ft. (Section 200.12)
	ROW is extended to boundary where applicable. (Section 200.02)
	Curb and gutter shown for all development except for property zoned AG-3 or AG-1. (Section 200.07)

DRAINAGE:	edition.
	VDOT approval.
	Correct peak discharge method used. Drainage maps are submitted outline Tc path, land uses on and off-site. Appropriate run-off coefficients are used. (Section 503.00)
	Minimum 15" dia. Culvert shown. (Section 504.01, Para. B, 1)
	All culverts in drainage easements and storm sewers are concrete with appropriate headwall (>36") or end section (= 36"). (Section 504.01, Para. D and Section 504.04, Para. B, 1 and 2)</td
	Plan and profiles are shown along with storm sewer and hydraulic calculations. (Section 504.03, Para. D)
	Sites which drain in excess of 100 acres, a flood study is submitted and/or is a FEMA studied area, and the minimum finished floors are shown on the plans and plat. Elevation certificate notification on the plans and plat. For flood studies, the engineer should assume off-site developed. Residential buildings minimum 2.0 ft. above base flood elevation and commercial buildings 1.0 ft. above BFE. (Refer to Roanoke County Zoning Ordinance, latest edition, Section 30.74)
	Inlets draining less than 100 acres, an easement is shown for the 100 yr. ponding elevation on the plans and plat. (Section 504.01, Para. C, d)
	Correct easement widths are shown on the plat. (Section 504.01, Para. E, 5, Section 504.02, Para C, 5, and Section 504.03, Para. D, 5)
	Liners, inlet and outlet protection shown on the plans IAW calculations (0 to 4 fps, grass liner, 4 to 7 fps EC-1, Type A, 7 to 18 fps, calculations determining the minimum liner and stone size required, 18 fps and greater energy dissipater). (Section 504.04, Para. C)
STORMWAT	ER MANAGEMENT: Refer to Roanoke County Department of Community Development's Drainage Standards (DS), latest edition and the Department of Community Development's Design, Construction, and Maintenance Standards Requirement for acceptance of Stormwater Management Facilities in Single-Family Subdivisions (ORD).
	Drainage map submitted with existing land uses identified for on and off-site, Tc shown for pre and post development, and existing land uses correctly identified. (Undeveloped $c = 0.35$ grass and $c = 0.30$ for woods.) (DS, Section 503.00)
	Access easements, min. 15 ft. width for slopes 0 to 8%, min. 20 ft. width for 8 to 18%, $>$ 18% slope, min. width of 25 ft. (ORD, Para. IV, A)
	Access roads are paved (Cat I, pavement design) with an approved VDOT entrance. Min. 12 ft. wide. (ORD, Para. IV, B)
	Routing shown for 10/2 and 25/10 submitted. (DS, Section 503.03, Para. B)
	Emergency spillway designed to pass the 100 year storm with 1.0 ft. of freeboard. (DS, Section 503.03, Para. B)
	Easement shown to encompass high water mark and/or 15 ft. outside toe of embankment. Fencing is required if the pond is over 4.0 ft. deep, takes four hours to drain or the interior slopes are steeper than 3 to 1. (DS, Section 505.02, Para. A, 6 and ORD, Para. III)

	Compaction and testing requirements shown. (ORD, Para. III)
	Check bonding amounts. (ORD, Para. V)
EROSION AN	D SEDIMENT CONTROL: Refer to Virginia's Erosion and Sediment Control Handbook, latest edition, and Roanoke County Erosion and Sediment Control Ordinance Chapter 8.1
	An ESC plan is required if the disturbance is greater than 5,000 sf, if not an agreement in lieu of a plan may be required. (Ch 8.1-6 RCESC)
An Erosion an	d Sediment Control Narrative is included and contains the following items (Ch. 6 VESCH):
	Project description: Briefly describes the nature and purpose of the land disturbing activity, and the area (acres) to be disturbed.
	Existing site conditions: A description of the existing topography vegetation and drainage.
	Adjacent areas: A description of the neighboring areas such as streams, lakes, residential areas, roads, etc., which might be affected by the land disturbance.
	Off-site areas: Describe any off-site land-disturbing activities that will occur (including borrow sites, waste or surplus areas, etc.). Will any other areas be disturbed?
	Soils: A brief description of the soils on the site giving such information as soil name, mapping unit, erodibility, permeability, depth, texture and soil structure.
	Critical areas: A description of the areas on the site which have potentially serious erosion problems (e.g. steep slopes, channels, wet weather/underground springs, etc.)
	Erosion and sediment control measures: A description of the methods which will be used to control erosion and sedimentation on the site (Must meet Chapter 3 VESCH).
	Permanent stabilization: A brief description, including specifications, of how the site will be stabilized after construction is completed.
	Stormwater runoff considerations: Will the development site cause an increase in peak runoff rates? Will the increase runoff cause flooding or channel degradation downstream? Describe the strategy to control stormwater runoff.
	Calculations: Detailed calculations for the design of temporary sediment basins, permanent stormwater detention basins, diversions, channels, etc. Include calculations for pre- and post-development runoff.
	Note to be included in ESC Plan:
	The location of all off-site fill or borrow areas associated with the construction project will be provided to Roanoke County Department of Community Development. An Erosion Control Plan or measures may be required for this area.
The following	Minimum Standards must be met (VESCH Ch 8):
	MS-1: Temporary and permanent stabilization of denuded areas (Permanent within 7 days for areas at final grade, Temporary for areas not to final for 30 days). a) Are practices shown on the plan? b) Are the limits of clearing and grading shown on the plan? c) Seed Specifications?

_ MS-2: Pr	otection or stabilization of on-site and off-site stockpiles and borrow areas.
_ MS-3: Pe	ermanent Stabilization of denuded areas not otherwise stabilized.
MS-4: Ins	stall E&S Measures as first step in land-disturbing activity.
MS-5: Ea	orthen controls and structures stabilized immediately upon installation.
drainage) a) b)	ediment Traps (less than 3 acres drainage) and basins (greater than 3 acres of b. Are traps/basins properly sized? Are the details shown on the plans? Are the calculations included in the narrative or plan?
MS-7: De	esign and construction of cut and fill slopes to minimize erosion.
MS-8: Co	oncentrated flow down cut and fill must be in adequate channel, flume, or slope drain.
MS-9: Slo	opes protected from seepage.
MS-10: S	storm sewer inlets must have adequate inlet protection.
MS-11: C	Outlet protection and channel lining is required prior to operation storm sewer system.
	finimize impacts when working in and around live watercourse. DEQ and/or Army Corps of Engineers permits may be required.
MS-13: T	emporary vehicular stream crossings for more than 2 trips in 6 months.
MS-14: C watercou	Other federal, state and local regulations must be met when working in live rses.
MS-15: T	he bed and banks of disturbed watercourses must be stabilized immediately.
a) b) c) d)	Itility installations. No more than 500 feet of open trench at any one time. Excavated material shall be placed on uphill side of trench. Effluent of dewatering system must be filtered. Proper backfill and compaction. Re-stabilize immediately.
MS-17: K	(eep paved or public areas clean (Construction Entrances)
	emporary measures should be removed with 30 when no longer needed. Schedule for maintenance
a) b)	Address increases in stormwater volume, velocity, and peak runoff. Are offsite, contributing areas accounted for? Are offsite, receiving areas and channels described and adequate Are calculations included in the narrative or plan and adequate?
The limits	s of clearing and grading must be shown.
Existing a	and proposed contours must be shown.
Existing v	regetation (trees, grassed areas, or unique vegetation) must be shown.
Location	of all erosion control practices

	The ESC plan should cover all phases of construction. (Ch 8, ESC Plan)					
	Current ESC detail sheet is included with appropriate bond amounts. (Refer to Roanoke County ESC Ordinance)					
	A maintenance schedule for the erosion controls measures must be set forth.					
CONSTRUC	CTION/FIELD CHANGES:					
Add the follo	owing notes to the plan:					
	None without approval of the Consulting Engineer and Roanoke County.					
	Any new alignments, change in grades, alternative pipe sizes or manholes will require a new set of plans stamped by the Consulting Engineer. County engineers will review plans within one day of submittal. Plan sheets can be 8.5 x 11 if the information is legible.					

ROANOKE COUNTY PLAT CHECKLIST

Subdivision name.
 Name of the surveyor or engineer.
 Surveyor's professional seal signed with a permanent marker.
 All owners, trustees, and beneficiaries must sign the plat with a permanent marker; signatures must be
 acknowledged by a notary public.
If the plat is drawn from record or from a current field survey.
 State plane coordinates strongly suggested.
 Original tax map numbers and tax map numbers assigned to new lots as shown on printout from review. All monuments and iron pins.
 Dood references
 Deed references.
 Date of the plat. Magisterial district. A legend. The scale. Boundary coordinates. Bearings and distances of all boundaries. Labeled lots.
 Maysterial district.
 The cools
 THE State.
 Bourings and distances of all houndaries
 Labeled late
 Labeled IOIS.
 Acreage of area of all flew tracts, including confinor open space, park, or public failus, and the remaining tract.
 All adjacent property owners, deed book and page references, lots, blocks, section numbers and the county's tax
map numbers.
 Identification of graves, objects, or structures marking a place of human burial. A vicinity map with a north arrow.
 A porth arrow that references either true or magnetic meridian
A north arrow that references either true or magnetic meridian. All existing building structures showing sethesks to perset property line.
 All existing building structures showing setbacks to nearest property line. Show and name all natural watercourses.
 Note the following on the plat: "This property is/is not located in a special flood hazard area designated as Zone 'X.' This determination is based on the current FEMA flood insurance rate maps and has/has not been verified by
actual field elevations."
Show FEMA Map Number or Community Panel Number and FEMA flood hazard zone.
 Topography map on a suitable scale and contour intervals when required by the agent.
 Show a signature and date blank for the agent, Roanoke County Planning Commission.
 Where applicable, the surveyor must determine whether the natural watercourse(s) adjacent to or on this site drains
 an upstream area of greater than 100 acres. If so, the surveyor must show the elevation of the 100-year
floodplain on each lot and add the following note to the plat: "The watercourse crossing this property drains an
upstream area of greater than 100 acres. A detailed flood study must be made and an elevation certificate may be
required before any building permits can be issued on this property."
Show the statement of consent to subdivisions from the State Code of Virginia, 1950 (as amended), and the
 county subdivision ordinance reference.
Note the following on the plat: "Approval hereof by the Roanoke County Subdivision Agent is for the purposes of
 ensuring compliance with the Roanoke County Subdivision Ordinance. Private matters, such as compliance
with restrictive covenants or other title requirements, applicable to the properties shown hereon, are not
reviewed or approved with regard to this subdivision or resubdivision."
The general locations of existing drain fields and reserve areas (if applicable), but not proposed drain fields.
 A note stating the type of septic system being used (i.e., conventional, nonconventional).
 A note stating "All lots shown on this subdivision plat have been evaluated by the personnel of the Virginia
 Department of Health and/or an authorized on-site soil evaluator and have met the criteria as set forth in the
Commonwealth of Virginia Sewage Handling and Disposal Regulations entitled 32.1 Code of Virginia, as amended
to date, and each lot or parcel is eligible for a septic permit."
Any nonpublic means of water service.
 Any existing or proposed public utility or other easements and a dedication statement.
 j g p p p

 Any existing or proposed private utility or other easements and a statement describing which easements serve
which lots. If any water meters and/or sewer lateral connections were set at old property lines, then private
easements may be required to provide service to the newly configured lots.
Other important features such as railroad rights-of-way, lakes, greenways, etc.
Access easements from the public right-of-way to the created tract(s).
All parcels of land designated, or reasonably expected to be required, for future street widening shall be dedicated.
A dedication statement for street rights-of-way that will be accepted by VDOT or the Town of Vinton.
 For private access easements, show the following note on each sheet of the plat: "The road serving this lot is
 private and its maintenance, including snow removal, is not a public responsibility. It shall not be eligible for
acceptance into the state secondary system for maintenance until such time as it is constructed and otherwise
complies with all requirements of the Virginia Department of Transportation for the addition of subdivision streets
current at the time of such request. Any costs required to cause this street to become eligible for addition into
the state system shall be provided with funds other than those administered by the Virginia Department of
Transportation."
 The names and VDOT route numbers for all existing, platted, and proposed streets.
 Width of existing, platted, and proposed streets indicating a prescriptive easement if one exists.
 If applicable, a note stating that "Tax map number is to be added and combined with tax map
number and is not to be used as a separate building lot."
 Plats showing boundary and ALTA/ACSM plats may show the following note on the plat and will not require the
signature of the agent: "This survey does not constitute a subdivision under the current Roanoke County
Subdivision and/or Zoning Ordinance."
 If a proposed subdivision is using the Family Exemption provision, in addition to the above requirements, the
requirements shown in Table 2 must also be included.
 A note stating "Approval of this subdivision is subject to the condition that the parcel subdivided can only be
conveyed to a member of the immediate family as set forth in Roanoke County's Subdivision Ordinance, as
amended, and the Code of Virginia, as amended. Conveyance to any other person or entity voids approval.
This restriction does not apply to subsequent reconveyance."
 Affidavits that are available in the Development Review office stating that the family subdivision is for the passing of
real property interests from one family member to another, rather than for the purpose of short-term investment.
 A copy of the proposed deed(s) from one family member to the other.
 A description of the family relationship in the consent statement or the following shown and notarized on the
plat: "I,, do hereby certify that is my legal New tract is being
conveyed to"

Schedule of Fees Plan and Plat Review

Department	<u>Description</u>	<u>Fee</u>	
Development	Small Subdivision Review (Less than 5 lots or parcels)	\$25.00	
Development	Large Subdivision Review	\$ 220.00 + \$45.00/lot or parcel	
Development	Vacation of Plat and Easements	\$150.00 + \$366 advertising fee	
Development	Subdivision Waiver or Variance	\$190.00	
Development	Erosion Plan Review	\$100.00+ \$100.00/acre or portion thereof	
Development	Site Plan Review	\$685.00 + \$40.00/acre	
Planning and Zoning	Variance	\$190.00	
Planning and Zoning	Administrative Appeal	\$275.00	
Planning and Zoning	Land Use Plan Amendment	\$710.00	
Planning and Zoning	Special Use B Landfill Special Use B Other	\$1,875.00 \$40.00	
Planning and Zoning	Rezoning: Agricultural/Single Family Residence	\$415.00 + \$20.00/acre or portion thereof	
Planning and Zoning	Rezoning: Multi-Family	\$860.00 + \$25.00/acre or portion thereof	
Planning and Zoning	Rezoning: Industrial	\$840.00 + \$30.00/acre or portion thereof	
Planning and Zoning	Rezoning: Commercial	\$945.00 + \$32.00/acre or portion thereof	

Fees effective as of July 1, 1990

WESTERN VIRGINIA WATER AUTHORITY - PLAN SUBMITTAL CHECKLIST

Project	Name:
Date:	Design Engineer:
1	Obtain an Availability Letter. An Availability Letter Application can be found at www.wvwawater.org under Developers/Engineers, Water/Sewer Availability Application.
2	
3	
4	Submit calculations for water and sewer systems as required by the Authority's Design and Construction Standards, available through the above referenced website.
5	Roanoke County projects shall include the most recent cover sheet located on the Roanoke County website at www.roanokecountyva.gov , under Community Development, Forms and Publications, Cover Sheet.
6	interface, and minimum sewer elevations at each proposed building.
7	Submit plan and profile sheets for all proposed public water and sewer.
8	Include all relevant WVWA standard details. Details are located on the Authority's website under developers/engineers.
9	
10	
11	
12	numbers (if undeveloped).
13	
14	Show and label all surveying benchmarks and monuments.
15	
16	
17	
18	Label diameter of all water and sewer lines, existing and proposed.
	Label all sewer manhole covers as standard or bolt-down.
	If a sewer sampling structure is required, ensure that flow passes through the structure in a straight vertical and horizontal alignment.
21	Label deflection angles on sewer lines at manholes.
22	encasements, etc
23	
24	
25	fittings, restraints, etc., with stationing.
26	Show on profile, material of all proposed Water and Sewer lines.
27	Submit completed checklist.

NO DEVELOPMENT PLANS WILL BE APPROVED BY THE AUTHORITY UNTIL ALL ITEMS ON THIS CHECKLIST HAVE BEEN COMPLETED OR WAIVED BY THE AUTHORITY.

Western Virginia Water Authority Water/Sewer Availability Application

Date:
Applicant:
Mailing Address:
Phone:
Cell:
Fax:
Property Address:
City or County:
Tax Map Number(s):
Development (Subdivision) Name:
Single Residential, Duplex, Multi-Residential, Subdivision, or Commercial Facility?
Water Meter Size Requested:
Sewer Lateral Size Requested:
COMPLETE THE FOLLOWING FOR NON-RESIDENTIAL AND MULTI-RESIDENTIAL SERVICES
Domestic Flow Required? **GPM ** (Attach completed "Sizing Water Service Lines and Meters" Form AND "Non-Residential Sanitary Sewer Checklist", blank forms available on website under "Engineers" section)
Is Building to be Sprinkled? YES / NO
Minimum Fire Flow Required?GPM

Return to Jamie Morris; Phone: 540-853-1588; Fax: 540-853-1017 Postal Mail: 2012 S. Jefferson Street, Suite 200, Roanoke, VA 24014

<u>Jamie.morris@westernvawater.org</u>; <u>www.westernvawater.org</u> Rev. 12/09/04

WVWA Sizing Water Service Lines and Meters

Development:				
Type of Occupancy:				
Plumbing Fixture			No. of Fixtures	
Bathtub				
Bedpad Washe	ers			
Combination Si	nk & Tray			
Dental Unit				
Dental Lavatory	/			
Drinking Founta				
Drinking Founta				
Sink	1/2" Con	inection		
	3/4" Con			
Lavatory	3/8" Con 1/2" Con			
Laundry Tray	1/2" Con 3/4" Con			
Shower Head (Shower only)			
Urinal -	Pedestal Flush	n Valve		
	Wall Flush Val			
	Trough (2 foot			
Wash Sink (ea	ch set of faucet	s)		
Water Closet				
-	Flush Valve Tank Type			
Dishwasher -	1/2" con: 3/4" con:			
Washing Machi	ine - 1/2" coni 3/4" coni			
	1" conne			
Hose Connection (Wash				
Down) -				
1/2" 3/4"		1/2" 3/4"		
Hose (50 foot Wash Down) 1/2"				
5/8" 3/4"		ο/ο 3/ Δ "		



Preliminary Pretreatment Wastewater Survey Form

Facility Name:
Facility Address:
Facility Telephone Number:Facility FAX Number:
Type of Industry, Manufacture, Trade or Business:
Products Produced:
Number of Employees:
General description of the industrial activities and/or plant processes at this site:
Current Federal Standard Industrial Classification Code (S.I.C.):
Does the facility discharge any water from parts washing operations, contact cooling, oil/water separators, or any other type of wastewater other than from restrooms? If so, describe:
"Industrial Waste" means liquid or other wastes resulting from any process of industry, manufacturing, trade, or business, or from the development of any natural resource.
"Other Waste" means decayed wood, sawdust, shavings, bark, limes, garbage, refuse, ashes, offal's, tar, oil, chemicals, and all other substances, except industrial waste and sewage, which may cause pollution in any waters.
1. Does this facility discharge industrial waste or other waste to the sanitary sewer?
2. Is the discharge from industrial waste or other waste continuous or batch?
3. Does this facility use any type of chemical mixed with water that is discharged to the sanitary sewer?
4. What is the total discharge to the sanitary sewer? gallons per day (gpd)
5. What is the total industrial or other waste discharge to the sanitary sewer? gallons per day (gpd).

	e any outside drains connected to the sanitary se	ewer? □Yes □No
9. Do	pes your facility discharge storm water to the san	
(regar		in any of the industrial categories or business activities listed below ste sludge, or hazardous wastes), place a check beside the category
Indus	strial Categories*	
[] A [] B [] C [] C	Asbestos Manufacturing Battery Manufacturing Can Making Carbon Black Cement Manufacturing Centralized Waste Treatment Coal Mining Copper Forming Dairy Products Electric and Electronic Components Manufacturing Electroplating Explosive Manufacturing Feedlots Ferro-alloy Manufacturing Foundries (Metal Molding and Casting) Glass Manufacturing Grain Mills Gum and Wood Chemicals norganic Chemicals ron and Steel Leather Tanning and Finishing Metal Finishing Metal Molding and Casting accility with processes inclusive in these business orical pretreatment standards. These facilities and	 Metal Powders Mineral Mining and Processing Nonferrous Metals Forming Nonferrous Metal Manufacturing Oil & Gas Extraction Organic Chemicals Manufacturing Paint and Ink Formulating Pesticides Manufacturing Petroleum Refining Pharmaceutical Phosphate Manufacturing Plastic Molding & Forming Plastics and Synthetic Materials Manufacturing Plastics Processing Manufacturing Porcelain Enamel Pulp, Paper, and Fiberboard Manufacturing Rubber Soap and Detergent Manufacturing Steam Electric Sugar Processing Textile Mills Timber Products Transportation & Equipment Cleaning Waste Combustors Other areas may be covered by Environmental Agency's (EPA) retermed "categorical users."
	Name of person completing this form.	Title of person completing this form.

Signature of person completing this form.

WESTERN VIRGINIA WATER AND SEWER AVAILABILITY & CONNECTION FEES FOR 2007

Meter Size	Water Availability Fee	Water Connection Fee	Sewer Availability Fee	Sewer Connection Fee
5 /8"	\$2,400.00	\$1,500.00	\$2,000.00	\$1,500.00(4")
3 /4"	\$3,600.00	\$1,515.00	\$3,000.00	\$1,500.00(4")
1"	\$6,000.00	\$1,600.00	\$5,000.00	\$2,000.00(6")
1 ½"	\$12,000.00	\$2,300.00	\$10,000.00	\$2,000.00(6")
2"	\$19,200.00	\$2,500.00	\$16,000.00	\$2,000.00(6")
3"	\$36,000.00	\$3,960.00	\$30,000.00	At Cost (8")
4"	\$72,000.00	\$12,300.00	\$60,000.00	At Cost (8")
6"	\$144,000.00	\$14,010.00	\$120,000.00	At Cost (8")

Fire Line Size	Connection Fee
4 - inch	\$10,300.00
6 - inch	\$10,800.00
8 - inch	\$13,300.00
10 - inch	\$15,000.00
12- inch	Actual Cost

ROANOKE COUNTY FIRE AND RESCUE CHECKLIST

e Service requirements, refer to Article III, Chapter 9 of the Virginia Statewide Fire Prevention Code – evention and Protection and the International Fire Code 2003 which includes the following:
 Location of all fire lanes with details of curb marking and sign locations (§9.21 Subsection 8-15 Roanoke County Code.
 Location of fire department connections (FDC) for fire protection systems such as sprinkler, standpipe, etc.
 Location and type of any proposed hazardous materials storage areas, inside or outside.
 Arrangement of water supply piping for fire protection, including the location of any backflow prevention devices.
 Calculation of the fire flow required on site. When the calculated fire flow exceeds 1000 g.p.m. an approved computer generated flow test shall be submitted verifying that the needed fire flow (NFF) is available on site.
 Location of any fencing, temporary or permanent, or any other potential obstruction to hydrants, fire department connections or fire lanes.
 Buildings which will be equipped with an automatic fire sprinkler system shall have the following note added to the plans: "Approval of site plan does not include the design of the fire sprinkler system underground piping from backflow prevention device to one foot above finished floor level. Prior to installation, shop drawings and a separate permit application and must be submitted through the department of building inspections for review and approval."
 Fire hydrants are shown as required by the Roanoke County Fire Marshal and are to be installed according to Roanoke County Fire Marshal's Office Fire Hydrant Placement Policy in accordance with the Statewide Fire Prevention Code 508.5.1.
 Fire apparatus Access Road(s) are shown according to Roanoke County Fire Marshal's Office Fire Hydrant Placement Policy in accordance with the Statewide Fire Prevention Code 503.1.
 Show static pressure (psi) and fire flow (gpm) with 20 psi residual at proposed fire hydrant.

ROANOKE COUNTY PLOT PLAN REQUIREMENTS

Supplemental Spring, 2006

ROANOKE COUNTY STORMWATER QUALITY REQUIREMENTS

Supplemental Spring, 2006